What is claimed is:

- 1. A multi-axis laser machine comprising:
 - a laser oscillator for outputting a laser beam;
- a deflection unit for switching a plurality of optical paths for said laser beam;

laser positioning units disposed on said optical paths respectively, the number of said laser positioning units being equal to the number of said optical paths, said laser beam being supplied to any one of said laser positioning units to thereby perform machining; and

an arbitration unit for controlling said laser positioning units independently of one another, supplying said laser beam to one of said laser positioning units which has finished positioning, and supplying said laser beam to a plurality of laser positioning units in a predetermined sequence when said laser positioning units finish positioning simultaneously.

2. A method for machining with a multi-axis laser machine including a laser oscillator for outputting a laser beam, a deflection unit for switching a plurality of optical paths for said laser beam, and laser positioning units disposed on said optical paths respectively, the number of said laser positioning units being equal to the number of said optical paths, said laser beam being supplied to any one of said laser positioning units to thereby perform machining, said method comprising the steps of:

operating said laser positioning units independently of one another; supplying said laser beam to one of said laser positioning units as soon as said laser positioning unit finishes positioning; and supplying said laser beam to a plurality of laser positioning units in a predetermined sequence when said laser positioning units finish positioning simultaneously.

3. A recording medium recording a computer-readable control program for controlling a multi-axis laser machine including a laser oscillator for outputting a laser beam, a deflection unit for switching a plurality of optical paths for said laser beam, and laser positioning units disposed on said optical paths respectively, the number of said laser positioning units being equal to the number of said optical paths, said laser beam being supplied to any one of said laser positioning units to thereby perform machining, said control program including the steps of:

operating said laser positioning units independently of one another; supplying said laser beam to one of said laser positioning units as soon as said laser positioning unit finishes positioning; and

supplying said laser beam to a plurality of laser positioning units in a predetermined sequence when said laser positioning units finish positioning simultaneously;

said control program being executably written in said recording medium so as to be readable by a computer.